1898 **MAGNETIC RECORDING** **V Poulsen (Denmark)**

No one really knowns how the idea of magnetic recording occurred to Poulsen. During his experiments he found that:

'It would be possible to magnetize a wire to different degrees so close together that sound could be recorded on it by running the current from a microphone through an electromagnet and by either drawing the wire rapidly past the electromagnet or drawing the electromagnet rapidly past the wire.'

This invention had several things to commend it: the wire or tape could be used over and over again by de-magnetizing it and recordings could be played thousands of times without destroying the quality. Poulsen invented this Telegraphone in 1898; with it he won the Grand Prix at the Paris Exposition in 1900. He filed an application for a Danish patent in 1898 and within two years he had filed additional patent applications in the United States and most European countries. These early patents suggested, as recording media, steel wires and tapes and discs of material coated with magnetisable metallic dust, though he himself used only steel wire and tape in his machinery. The basic principles enunciated by Poulsen are still applied in all types of modern magnetic recorders.

SOURCE: *The Source of Invention* by J Jewkes, D Sawers and R Stillerman (London: MacMillan & Co.) p 326 (1958)

SEE ALSO: 'The development of the magnetic tape recorder' *Engineer* (18 March 1949)